INTERNATIONAL JOURNAL OF ACCOUNTANCY, FINANCE AND TAXATION
DEPARTMENT OF ACCOUNTANCY, IMO STATE UNIVERSITY, OWERRI.

IJAFT

ISSN: 3027-0378

CORPORATE SOCIAL RESPONSIBILITY, AUDIT QUALITY AND FINANCIAL PERFORMANCE OF DEPOSIT MONEY BANKS IN NIGERIA.

Aiyesan O.O

Department of Accounting, Adekunle Ajasin University, Akungba Akoko, Ondo State Nigeria
E-mail: Olabode.aiyesan@aaua.edu.ng

K E Y W O R D S

CSR, board independence, gender diversity, audit size, financial performance

A B S T R A C T

The study examined the influence of corporate social responsibility, audit quality and financial performance of deposit money banks in Nigeria. The study covered a period from 2012-2024. Specifically, the study investigated whether board size, board independence, board gender diversity, board meetings on financial performance and whether such effects are strengthened or weakened by audit quality proxied by audit fees. Using panel data from eleven listed banks and employing pooled Ordinary Least Squares, fixed effects and random effects estimators, the fixed effects model emerged as the preferred specification following the Hausman test, thereby providing the most reliable basis for inference. The findings revealed that audit quality and board gender diversity records a positive but statistically insignificant coefficient for ROA (β = 0.0251). Audit quality and board meetings exerts a positive and weakly significant effect on ROA (β = 0.2308). Board independence (BODI) equally demonstrates a negative and statistically significant effect on return on assets (β = -0.0211,

Introduction

Corporate social responsibility serves as a critical strategic imperative for Nigerian deposit money banks, enabling these institutions to address the multifaceted needs of diverse stakeholders and contribute directly to societal infrastructure and development (Itoya et al., 2022, ; Ajarat, 2025). Beyond its social utility, structured CSR initiatives have been empirically shown to influence key financial metrics such as return on assets within the Nigerian banking sector (Adu & Ajigbotoso, 2024).

Simultaneously, the integrity of these financial metrics relies heavily on robust audit quality, which ensures transparency and mitigates information asymmetry in a volatile operating environment characterized by strict regulatory oversight and evolving economic pressures (williams & Johnson 2025). Within the Nigerian context, the interplay between corporate disclosure practices and independent auditing remains a decisive factor in maintaining investor confidence amidst significant macroeconomic volatility (Bande, 2023; Korolo & Korolo, 2023). Consequently, rigorous audit processes serve as a foundational mechanism for validating the efficacy of these social investments, directly impacting the credibility of reported financial performance (Chinasa et al., 2026).

Literature Review

Theoretical Foundation

Agency Theory (Jensen & Meckling, 1976) underpins most governance research in Nigerian banking. The theory acknowledges the need for accountability in modern society and the role of audit in providing reasonable assurance and unbiased opinion to users of financial statements. It argues that the expert opinion of the auditor, based on independent examination of financial reports, reduces information asymmetry between principals and agents. Agency theory posits that task and administration be delegated to a certain person that are knowledgeable with an expectation to minimize loss and meet shareholders need (Schroeder et al. 2010, Jensen & Mecklin 1976). Agency theory suggest that shareholders appoint directors to ensure management acts in their interests ((Schroeder et al. 2010, Jensen & Mecklin 1976) and the effectiveness of this mechanism in banks is influenced by the sector's complex risk profile and regulatory oversight. An oversized board may introduce inefficiencies, such as the free-rider problem, which can undermine value creation. The independence of directors is particularly critical in banking, as any connection with management could compromise the integrity of governance and, by extension, the safety of depositors' funds. Ownership concentration can enhance oversight, but must be balanced against the risk of entrenchment. Compensation structures are designed to align management incentives with long-term performance, while market controls such as proxy contests and takeovers serve as external checks on managerial behavior. However, in banking, these tools are often supplemented or superseded by regulatory oversight, reflecting the sector's systemic importance and the need to safeguard economic stability (Fahmida, 2025). Agency theory solves two (2) sets of problems n difficulties which include monitoring and attitude towards risk (Mamdouh & Saleh, 2024). Accordingly, firms want to improve financial performance, reduce losses and create value.

In contrast, stakeholder theory, drawing on Freeman (1984), broadens the governance lens. In the context of earnings management and financial reporting, stakeholder theory suggests that companies must provide accurate and transparent financial information to all stakeholders. Independent directors play a key role in ensuring transparency and accountability, providing oversight and guidance on financial reporting.

Role of Corporate Social Responsibility, Audit Characteristics and Firm Outcomes

CSR is central to the governance framework in banks, as effective boards are responsible for setting strategic direction, monitoring management, and ensuring compliance with regulatory and ethical standards. The quality of CSR oversight is directly linked to firm performance, particularly in the context of deposit money banks (DMB) where operational, financial, and reputational risks are pronounced. A well-functioning CSR mitigates these risks by fostering transparency, accountability, and prudent risk management, thereby enhancing the bank's ability to achieve its objectives and protect stakeholder interests (Liang 2025).

Audit Committee Characteristics and Financial Performance

Key Attributes Studied

The audit committee literature in Nigerian banking consistently focuses on four core attributes: size, audit committee independence, board gender diversity, and diversity of skills. Studies draw on agency theory and stakeholder theory to examine how audit committee independence, size, board gender and frequency of meeting. Findings generally indicate that audit committee independence and financial expertise. significantly improve reporting quality, while committee size and meeting frequency show mixed results from the underlisted researchers (Ajape, Oyewale & Adudu (2023), Ayinla, Aliyu & Abdullah (2022), Okolie & Ogbaragu (2022), Onyebuchi & Barinem (2026), Liang 2025), Abdul Rahman & Mohamed (2006), Nurhei, Efe and Iyayi (2023) Kamal (2025),

Audit Committee Independence

The interaction between audit quality and board independence (AUDF × BODI) produces one of the strongest moderation effects in the model, exerting a positive and highly significant effect on ROA ($\beta = 0.0676$, $p < 0.01$), although remaining insignificant for Tobin's Q ($\beta = 0.0020$). This result is particularly important when compared with the baseline findings, where board independence exerted a negative and significant effect on profitability.

Board Gender Diversity

The interaction between audit quality and board gender diversity (AUDF × BOGD) records a positive but statistically insignificant coefficient for ROA ($\beta = 0.0251$) and Tobin's Q ($\beta = 0.0010$)

Compared with the baseline model where board gender diversity exerted a negative and significant effect on ROA, the positive interaction term suggests that stronger audit quality improves the effectiveness of gender-diverse boards by mitigating the earlier adverse profitability effect.

Board Size

The interaction between audit quality and board size (AUDF × BODS), the fixed effects coefficient is positive but statistically insignificant for both ROA ($\beta = 0.0964$) and Tobin's Q ($\beta = -0.0135$). Relative to the baseline model where board size exerted a negative and significant effect on ROA, the positive interaction coefficient suggests that higher audit quality weakens the harmful profitability effect of large boards, even though the moderation is not sufficiently strong to become statistically meaningful.

Meeting Frequency

Research indicates that the size and frequency of audit committee meetings do not significantly impact bank financial performance, though some studies note that regular meetings help committees respond to emerging governance and CSR issues more promptly. The interaction between audit quality and board meetings (AUDF × BODM) exerts a positive and weakly significant effect on ROA ($\beta = 0.2308$, $p < 0.10$), while remaining insignificant for Tobin's Q ($\beta = 0.0146$). Relative to the baseline model in which board meetings negatively and significantly affected profitability, the positive moderation coefficient suggests that stronger audit quality reduces the harmful profitability effect of frequent meetings.

CSR and Financial Performance of Nigerian Banks

The CSR Performance Nexus

The relationship between CSR and financial performance among Nigerian banks is a recurring but inconclusive debate. Studies employ a range of performance proxies Return on Assets (ROA) and Return on Equity (ROE).

Gaps

The literature include: (i) limited studies that simultaneously model CSR, audit committee, and financial performance in a single framework; (ii) a heavy reliance on accounting-based performance measures with insufficient market-based measures (e.g., Tobin's Q); (iii) few studies accounting for lagged effects of CSR spending; and (iv) limited integration of ESG metrics with audit committee oversight in the Nigerian banking context. The findings of some studies suggest that the involvement of commercial banks in CSR activities and their proper disclosure has helped to improve accounting-based financial performance, proxied by ROE and ROA.

However, other evidence is less optimistic. Some panel data analyses reveal that CSR expenditure had no significant effect on all three proxies of corporate financial performance ROA, ROE, and EPS of quoted banks in Nigeria, supporting the argument in the literature that financial performance alone does not justify expenditure on CSR activities. More recent research confirms this mixed picture: panel data analysis employing OLS regression techniques revealed a significant negative relationship between CSR expenditure and both ROA and ROE, indicating that higher CSR spending was associated with lower financial performance in terms of these metrics.

However, when financial performance indices were individually analysed, results were mixed previous ROE revealed significant positive effects on CSR expenditure.

CSR Dimensions and Performance

Breaking CSR into its dimensions yields richer insights. Philanthropic and legal responsibilities positively impact financial performance, while economic responsibilities showed no significant relationship. Positive correlations were established particularly between philanthropic responsibility and Profit After Tax.

CSR Cost Components

Studies have also examined the effect of specific CSR cost components including community development costs, health and safety costs, and social regulation costs on net profit margin, using secondary data from annual reports of banks listed on the Nigerian Stock Exchange.

ESG and Sustainability Reporting

Recent literature has extended the CSR conversation to ESG (Environmental, Social, and Governance) frameworks. Mixed-method studies combining panel-data econometric models with qualitative content analysis of ESG disclosures from annual and sustainability reports, and CBN filings covering 2022–2024, find that profitability indicators particularly ROE and EPS are the dominant drivers of Profit Before Tax, with total assets playing a secondary, reinforcing role.

Audit Committee Attributes and CSR Disclosure

A growing strand of literature links audit committee characteristics directly to CSR disclosure quality in Nigerian banks. Using stakeholder and agency theories with data from 12 banks over 2012–2022, research finds that a larger audit committee significantly enhances CSR disclosure, highlighting the importance of AC size in promoting effective stakeholder engagement and improving corporate transparency. AC independence also has a favourable and substantial effect on CSR disclosure, indicating that independent audit committees can hold management accountable for CSR commitments. Regular AC meetings equally show a positive effect, suggesting that frequent meetings allow the committee to respond quickly to emerging CSR issues.

Non-Performing Loans as a Financial Performance Dimension

Audit committee research has also extended to credit risk management. Studies have investigated the influence of audit committee attributes on banks' non-performing loans (NPLs) in Nigeria, with related literature noting that non-performing loans and bank performance interact in complex ways, and that corporate social responsibility may play a role in this dynamic for banking institutions.

Research Design

Sample Construction and Data Sources

This study examines the moderating role of audit quality on the relationship between board performance and financial performance among listed banks in Nigeria over the fiscal years 2012 through 2024. The Nigerian banking sector provides an empirically important setting because of its systemic significance, high regulatory intensity and persistent concerns regarding governance effectiveness, financial transparency and risk oversight. The sample period strategically captures major developments in Nigeria's post-consolidation banking environment, including intensified prudential regulation, evolving corporate governance reforms, post-IFRS reporting requirements and increasing scrutiny of board accountability and audit practices. Furthermore, the period encompasses multiple economic cycles and episodes of financial uncertainty that provide substantial variation in governance and performance outcomes. The sample comprises all deposit money banks listed on the Nigerian Exchange Group (NGX) during the study period. Following a census sampling approach, we include all eleven listed banks that maintained continuous listing status and possessed sufficient annual governance and financial disclosures between 2012 and 2024. The use of a census approach is particularly appropriate given the relatively small size of the Nigerian listed banking industry and eliminates concerns associated with sampling bias or representativeness. By retaining the full population of listed banks, the study ensures broad institutional coverage and strengthens the external validity of the findings within the Nigerian banking context. The final balanced panel consists of 143 bank-year observations.

Data are assembled from multiple but complementary secondary sources. Governance and financial variables are primarily obtained from audited annual reports and accounts of the sampled banks, retrieved from corporate investor-relations portals and the Nigerian Exchange disclosure platform. Annual reports constitute an appropriate data source because they provide detailed disclosures relating to board composition, directors' remuneration, ownership structure, board meetings, audit fees and audited financial performance. Financial market information required for constructing market-based performance measures is supplemented using disclosures from the Nigerian Exchange Group. Following established governance literature, reliance on audited annual reports improves data credibility because such disclosures are subject to statutory audit verification and regulatory oversight. To minimize potential distortions arising from extreme observations, all continuous variables are winsorized at the 1st and 99th percentiles, consistent with prior corporate governance and banking studies.

Measurement of Financial Performance

To capture the multidimensional nature of firm performance, the study employs both accounting-based and market-based indicators of financial performance. The use of alternative performance measures addresses concerns that governance mechanisms may affect internal profitability and external market valuation differently. The first dependent variable is return on assets (ROA), an accounting-based measure of managerial efficiency that captures the ability of banks to generate earnings from their asset base. Consistent with prior governance and banking literature, ROA is computed as net income divided by total assets. ROA remains particularly relevant within the banking sector because it reflects internal operational efficiency, asset utilization and managerial effectiveness in converting financial resources into profitability. The second dependent variable is Tobin's Q (TOBQ), a market-based measure of firm valuation that captures investors' expectations regarding future performance and value creation. Following conventional finance literature, Tobin's Q is measured as the market value of equity plus total liabilities divided by total assets. The inclusion of Tobin's Q is especially important because governance mechanisms may influence investor confidence, market expectations and valuation outcomes differently from accounting profitability.

Moderating Variable: Audit Quality

The principal moderating variable in this study is audit quality (AUDF), proxied by audit fees. Following established auditing and governance literature, audit fees are measured as the natural logarithm of annual audit fees disclosed in firms' financial statements. Audit fees represent a widely accepted proxy for audit quality because they reflect audit effort, audit intensity and the level of monitoring associated with financial reporting assurance. Higher audit fees generally imply greater audit scrutiny, stronger assurance quality and improved financial reporting credibility. The use of audit fees as a moderator is theoretically important because audit quality is expected to strengthen or weaken the effectiveness of governance mechanisms. Strong audit systems may complement board oversight by reducing information asymmetry, improving transparency and enhancing the reliability of financial information available to directors.

Accordingly, the study introduces interaction terms between audit quality and board performance variables to evaluate whether governance outcomes become more effective under stronger audit monitoring.

Control Variables

Following prior governance and banking studies, the empirical models include firm-specific control variables capable of influencing financial performance independently of board mechanisms. These controls are introduced to isolate the unique effects of governance and audit quality on performance outcomes. Leverage (LEV) is measured as total liabilities divided by total assets and captures financial risk exposure and capital structure effects. Highly leveraged banks may experience increased financial pressure capable of influencing profitability and market valuation. Firm size (FSIZ) is measured as the natural logarithm of total assets. Larger firms may benefit from economies of scale, stronger market power and greater resource access, potentially affecting financial performance. Firm age (FAGE) captures the number of years since incorporation and reflects organizational maturity, institutional experience and accumulated operational capabilities that may shape firm outcomes.

Empirical Strategy

To examine the direct relationship between board performance and financial performance, the study estimates the following baseline panel regression model:

$$FP_{i,t} = \beta_0 + \beta_1 BODS_{i,t} + \beta_2 BOGD_{i,t} + \beta_3 BODI_{i,t} + \beta_4 BODM_{i,t} \\ + \beta_7 LEV_{i,t} + \beta_8 FSIZ_{i,t} + \beta_9 FAGE_{i,t} + \mu_i + \lambda_t + \varepsilon_{i,t}$$

where $FP_{i,t}$ represents financial performance alternatively measured using ROA and Tobin's Q for bank i in year t; μ_i captures unobserved bank-specific effects; λ_t represents year effects; and $\varepsilon_{i,t}$ denotes the stochastic disturbance term.

To evaluate the moderating role of audit quality, the study augments the baseline specification by incorporating audit quality and interaction terms between audit quality and board performance indicators:

$$
\begin{aligned}
FP_{i,t} = {} & \beta_0 + \beta_1 BODS_{i,t} + \beta_2 BOGD_{i,t} + \beta_3 BODI_{i,t} \\
& + \beta_4 BODM_{i,t} \\
& + \beta_9 (AUDF \times BOGD)_{i,t} \\
& + \beta_{10} (AUDF \times BODI)_{i,t} \\
& + \beta_{11} (AUDF \times BODM)_{i,t} \\
& + \beta_{14} LEV_{i,t} + \beta_{15} FSIZ_{i,t} \\
& + \beta_{16} FAGE_{i,t} + \mu_i + \lambda_t + \varepsilon_{i,t}
\end{aligned}
$$

The interaction coefficients capture whether stronger audit quality amplifies or attenuates the influence of board mechanisms on financial performance.

Estimation Procedure and Diagnostic Tests

The empirical analysis follows a sequential panel estimation strategy involving pooled Ordinary Least Squares (OLS), fixed effects (FE) and random effects (RE) estimators. Pooled OLS provides preliminary estimates under the assumption of homogeneous firm behaviour, while fixed and random effects models explicitly account for unobservable firm-level heterogeneity. To determine the most appropriate estimator, the study employs the Hausman specification test. A significant Hausman statistic indicates correlation between firm-specific effects and explanatory variables, thereby supporting the fixed effects estimator. The fixed effects model is particularly suitable for the present study because it controls unobserved time-invariant institutional characteristics unique to banks, including governance culture, managerial orientation, organizational complexity and regulatory positioning. Several diagnostic procedures are conducted to ensure the reliability of the estimates. Multicollinearity is assessed using the Variance Inflation Factor (VIF), with values substantially below the conventional threshold indicating the absence of harmful variable interdependence. Heteroscedasticity is examined using the Breusch–Pagan test, while the Chow F-test assesses whether panel estimation dominates pooled regression. The Breusch–Pagan Lagrange Multiplier (LM) test further determines whether random effects estimation is preferable to pooled OLS.

Results and Discussion

Descriptive Statistics and Correlation Analyses

Table 1 presents the descriptive statistics of the variables employed in examining the moderating role of audit quality on the relationship between board performance and financial performance of listed banks in Nigeria over the period 2012–2024. The results reveal that the average value of Tobin's Q (TOBQ), which measures market-based financial performance, is 0.860 with a standard deviation of 0.272, indicating relatively low market valuation among the sampled banks and limited dispersion across firms. The minimum and maximum values of 0.100 and 2.550 respectively suggest considerable variation in market perception and valuation across banks. Return on assets (ROA), representing accounting-based financial performance, recorded a mean value of 1.601 with a standard deviation of 1.684, indicating moderate profitability levels but with substantial fluctuations among banks during the study period. The minimum value of -9.530 further suggests that some banks experienced periods of financial distress or operational inefficiency. Regarding board characteristics, board size (BODS) has an average of approximately 13 directors, suggesting that Nigerian listed banks maintain relatively large boards in compliance with governance requirements. Board gender diversity (BOGD) averaged 21.741%, indicating relatively low female representation on boards despite increasing advocacy for diversity, while board independence (BODI) recorded a high mean of 62.564%, implying that independent directors constitute a substantial proportion of board membership, which may strengthen monitoring effectiveness.

Board meetings (BODM) averaged approximately six meetings annually, suggesting relatively active governance oversight, although the maximum value of sixteen meetings indicates that some banks met more frequently, possibly due to regulatory or operational challenges. suggesting consistency in audit expenditures among listed banks. Among the control variables, leverage (LEV) averaged 93.134%, reflecting the highly leveraged nature of banking institutions, while firm size (FSIZ) and firm age (FAGE) indicate that the sampled banks are relatively large and mature institutions, with an average age of approximately 27 years. Overall, the descriptive statistics reveal sufficient variation across the variables, thereby supporting robust panel estimation and inferential analysis.

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
tobq	143	0.860	0.272	0.100	2.550
roa	143	1.601	1.684	-9.530	5.620
bods	143	12.720	3.489	3.000	21.000
bogd	143	21.741	14.087	0.000	75.000
bodi	143	62.564	14.258	18.750	90.000
bodm	143	5.853	2.062	2.000	16.000
audf	143	5.617	0.691	4.260	10.070
lev	143	93.134	21.900	81.370	254.750
fsiz	143	9.349	0.465	8.190	10.460
fage	143	26.909	14.881	8.000	56.000

Source: Authors, 2026

Table 2 presents the correlation matrix showing the degree and direction of association among the variables employed in the study. The results indicate that the relationship between the two measures of financial performance, Tobin’s Q (TOBQ) and return on assets (ROA), is weakly positive (r = 0.167), suggesting that accounting-based profitability and market-based valuation move in the same direction, albeit modestly. Regarding board performance indicators, board size (BODS) exhibits a negative association with Tobin’s Q (r = -0.273) but a weak positive relationship with ROA (r = 0.089), implying that larger boards may reduce market valuation while exerting minimal influence on accounting profitability. Board gender diversity (BOGD) is weakly negatively associated with Tobin’s Q (r = -0.163) and weakly positively related to ROA (r = 0.111), suggesting that female representation may have a modest influence on accounting performance but limited effect on market valuation. Board independence (BODI) demonstrates weak negative relationships with both Tobin's Q (r = -0.062) and ROA (r = -0.202), indicating that greater board independence may not necessarily translate into superior financial performance among Nigerian listed banks. Similarly, board meetings (BODM) reveal weak negative relationships with Tobin's Q (r = -0.142) and ROA (r = -0.031), suggesting that frequent meetings alone may not enhance firm performance and may even reflect operational or governance concerns requiring additional oversight. The moderating variable, audit quality proxied by audit fees (AUDF), exhibits a moderate positive relationship with ROA (r = 0.422), indicating that higher audit expenditure may improve accounting profitability through enhanced monitoring and reporting credibility, while showing a negative relationship with Tobin's Q (r = -0.307), suggesting that investors may interpret higher audit fees as signals of complexity or increased risk. Among the control variables, leverage (LEV) has a negative association with ROA (r = -0.482), implying that excessive debt burden may weaken profitability, whereas firm size (FSIZ) is positively associated with ROA (r = 0.377), indicating that larger banks may benefit from economies of scale and operational efficiency. Firm age (FAGE) demonstrates generally weak relationships with performance indicators, suggesting a limited direct influence.

Importantly, the highest correlation coefficient among the explanatory variables is observed between audit fees (AUDF) and firm size (FSIZ) at 0.891, which is relatively high and may suggest potential multicollinearity concerns. However, since correlation analysis alone is insufficient to establish multicollinearity, further diagnostic testing using the variance inflation factor (VIF) becomes necessary. Overall, the correlation coefficients remain below the conventional threshold of 0.90 for severe multicollinearity among most variables, thereby providing preliminary evidence that the variables can be jointly included in the regression model without serious econometric concerns.

Table 2: Correlation Analysis

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) tobq	1.000											
(2) roa	0.167	1.000										
(3) bods	-0.273	0.089	1.000									
(4) bogd	-0.163	0.111	0.090	1.000								
(5) bodi	-0.062	-0.202	-0.450	-0.030	1.000							
(6) bodm	-0.142	-0.031	0.123	0.022	-0.009	1.000						
(7) audf	-0.307	0.422	-0.012	0.396	-0.004	0.129	-0.073	0.030	1.000			

(8) lev	0.133	-0.482	-0.090	-0.046	-0.015	0.199	0.240	-0.028	-0.250	1.000		
(9) fsiz	-0.301	0.377	0.063	0.340	-0.015	0.262	-0.056	-0.002	0.891	-0.054	1.000	
(10) fage	-0.130	-0.170	0.021	0.237	0.057	0.194	-0.026	-0.110	0.310	0.366	0.390	1.000

Source: Authors, 2026

4.2 Main Results

Table 3 presents the regression evidence on the relationship between board performance indicators and the financial performance of listed banks in Nigeria using pooled Ordinary Least Squares (OLS), fixed effects (FE), and random effects (RE) estimators. Before interpreting the substantive coefficients, the diagnostic statistics provide strong econometric justification for relying on the fixed effects estimates as the basis for inference. The mean Variance Inflation Factor (VIF) of 1.483 indicates the absence of multicollinearity concerns, implying that the explanatory variables are sufficiently distinct and do not excessively overlap in explanatory content. This enhances confidence that the estimated coefficients are stable and not distorted by strong interdependence among governance variables.

However, the significant Breusch–Pagan statistics for both the ROA and Tobin's Q equations indicate the presence of heteroscedasticity in the pooled models, suggesting unequal error variances across firms and reinforcing the need for panel estimators. The significance of the Chow F-test further confirms the presence of firm-specific heterogeneity, implying that listed banks possess unique institutional characteristics that systematically shape performance outcomes. More importantly, the Hausman test is statistically significant for both ROA ($p = 0.000$) and Tobin's Q ($p = 0.001$), confirming that the fixed effects estimator is superior because unobserved bank-specific characteristics are correlated with governance variables. This is an important finding in itself because it suggests that board effectiveness in Nigerian banks is embedded within institutional realities such as managerial culture, regulatory compliance orientation, governance traditions, ownership structures and operational complexity. Consequently, the fixed effects estimates provide the most robust platform for discussing how board mechanisms influence accounting-based and market-based performance. Beginning with board size (BODS), the fixed effects result reveals a negative and statistically significant effect on return on assets ($\beta = -0.0927$, $p < 0.10$), while the effect on Tobin's Q remains positive but statistically insignificant ($\beta = 0.0003$). The negative and significant accounting performance effect suggests that larger boards may weaken profitability by creating bureaucratic rigidities, slower decision-making processes and coordination inefficiencies. In the banking sector, where rapid strategic responsiveness and timely risk management are critical, excessively large boards may complicate consensus-building and dilute accountability among directors. The implication is that increasing board membership beyond an optimal threshold may generate monitoring redundancy rather than governance efficiency. This finding aligns with the agency theory perspective, which argues that larger boards may suffer from communication problems and free-rider behaviour that weaken effective oversight.

The result, however, suggests an important distinction between operational profitability and market perception, as investors do not appear to systematically reward or punish larger boards in their valuation of Nigerian banks. This partly converges with the findings of Kamal (2025), who acknowledged the importance of board effectiveness in improving firm performance but also identified governance complexity associated with ownership and structural arrangements. The result also partially aligns with Mohammed and Dauda (2019), who found a positive but insignificant association between board size and governance outcomes among Nigerian deposit money banks. The divergence in significance may reflect differences in outcome variables, given that the earlier study focused on financial reporting quality rather than profitability. Board independence (BODI) equally demonstrates a negative and statistically significant effect on return on assets ($\beta = -0.0211$, $p < 0.05$), while its effect on Tobin's Q remains negative but insignificant ($\beta = -0.0010$). The negative sign challenges the conventional governance expectation that greater independence necessarily improves firm outcomes. One plausible explanation is that highly independent boards may prioritize compliance, conservatism and risk aversion at the expense of profitability, particularly within a heavily regulated sector such as banking. Independent directors may strengthen oversight and monitoring, but such intensified scrutiny may simultaneously reduce managerial flexibility, delay strategic decisions and increase governance costs.

Moreover, external directors may possess limited institution-specific knowledge needed for nuanced operational decisions, thereby weakening their immediate contribution to profitability. The policy implication is not that board independence should be discouraged, but rather that regulatory emphasis should move beyond numerical independence toward competence, industry expertise and active engagement. The finding diverges from agency theory, which predicts that independent directors improve monitoring effectiveness and reduce agency conflicts, thereby enhancing performance. Empirically, the result contradicts Kamal (2025), who reported positive performance implications of board independence, and Nurhei, Efe and Iyayi (2023), who found a positive relationship between board independence and financial reporting quality.

Nonetheless, the result resonates with Mohammed and Dauda (2019), whose evidence suggested that board independence may not always produce statistically meaningful governance outcomes in Nigerian deposit money banks. Board meetings (BODM) reveal one of the strongest governance effects in the model, exerting a negative and highly significant influence on return on assets ($\beta = -0.1484$, $p < 0.01$), while remaining insignificant for Tobin's Q ($\beta = -0.0074$). Although frequent meetings are conventionally interpreted as evidence of active monitoring, the negative sign suggests a more complex reality in Nigerian banks. Rather than signaling strategic effectiveness, frequent board meetings may reflect underlying governance tensions, operational crises, regulatory pressures or financial distress that require repeated intervention.

In such contexts, meetings become reactive rather than strategic, consuming organizational resources without necessarily enhancing value creation. The economic implication is particularly important because it cautions against equating meeting frequency with governance quality. For regulators and bank stakeholders, the focus should shift toward meeting effectiveness, agenda quality, decision implementation and strategic depth rather than the sheer number of meetings held annually. The result partly contradicts agency theory, which expects stronger monitoring through more active boards to improve performance.

However, it converges strongly with Nurhei, Efe and Iyayi (2023), who similarly found that frequent meetings did not significantly improve governance outcomes and argued that expertise and quality deliberation matter more than meeting frequency. It also qualifies the broader governance optimism found in Kamal (2025), suggesting that active governance structures do not automatically translate into superior financial outcomes. Board gender diversity (BOGD) exhibits a negative and highly significant effect on return on assets ($\beta = -0.0340$, $p < 0.01$), whereas the effect on Tobin's Q is positive but insignificant ($\beta = 0.0004$). This result requires nuanced interpretation because it should not be misconstrued as evidence against female participation on boards. Rather, the finding may reflect structural and institutional realities within Nigerian banking governance. Female board representation remains relatively low, as reflected in the descriptive statistics, suggesting that gender inclusion may still be largely symbolic or insufficiently influential to shape strategic outcomes.

Additionally, more diverse boards may introduce broader consultation and more cautious governance approaches that prioritize risk control over aggressive short-term profitability. While this may suppress accounting returns in the short run, it may contribute to stronger institutional sustainability over time. The positive but insignificant market valuation effect further suggests that investors are not yet systematically incorporating gender diversity into firm valuation decisions. This finding diverges from resource dependence theory, which predicts that diverse boards enrich organizational resources, perspectives and strategic quality. Empirically, the result contradicts Akisole and Obele (2024), who found that female board representation improves governance outcomes through stronger corporate social responsibility disclosure.

However, the divergence is understandable because the prior study focused on disclosure quality rather than financial performance. It also contrasts with Kamal (2025), whose findings highlighted gender diversity as a positive governance driver of performance. The implication for policy is not to reduce female participation, but to strengthen meaningful inclusion through competence-based appointments, leadership integration and strategic empowerment.

Table 3: Regression Results

VARIABLES	ROA Pool OLS	ROA FE	ROA RE	TOBQ Pool OLS	TOBQ FE	TOBQ RE
bods	-0.0660*	-0.0927*	-0.0660*	-0.0101***	0.0003	-0.0101***
	(0.037)	(0.050)	(0.037)	(0.004)	(0.005)	(0.004)
bogd	-0.0138	-0.0340***	-0.0138	0.0001	0.0004	0.0001
	(0.009)	(0.010)	(0.009)	(0.001)	(0.001)	(0.001)
bodi	-0.0189**	-0.0211**	-0.0189**	0.0002	-0.0010	0.0002
	(0.009)	(0.010)	(0.009)	(0.001)	(0.001)	(0.001)
bodm	-0.2031***	-0.1484***	-0.2031***	-0.0061	-0.0074	-0.0061
	(0.054)	(0.054)	(0.054)	(0.005)	(0.006)	(0.005)
lev	-0.0256***	-0.0389***	-0.0256***	0.0102***	0.0101***	0.0102***
	(0.007)	(0.008)	(0.007)	(0.001)	(0.001)	(0.001)
fsiz	1.1518***	-2.9383**	1.1518***	-0.0418	-0.0642	-0.0418
	(0.278)	(1.237)	(0.278)	(0.027)	(0.133)	(0.027)
fage	-0.0224***	0.2399***	-0.0224***	-0.0025***	0.0004	-0.0025***
	(0.008)	(0.087)	(0.008)	(0.001)	(0.009)	(0.001)
Constant	-2.0577	31.1975***	-2.0577	0.6203**	0.6899	0.6203**
	(2.892)	(9.855)	(2.892)	(0.286)	(1.057)	(0.286)
Observations	143	143	143	143	143	143
p(F-Stat)	0.000	0.000		0.000	0.000	
R-Squared	0.474	0.404	0.317	0.803	0.739	0.725
Adj R-squared	0.439			0.789		
Mean VIF	1.483			1.483		
Breuch-Pagan	0.000			0.000		
Chow F-Test		0.000			0.000	
Hausman Test		0.000			0.001	
p(Chi2)			0.000			0.000
LM Test			1.000			1.000

Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Table 4 presents the moderating role of audit quality, proxied by audit fees (AUDF), on the relationship between board performance indicators and the financial performance of listed banks in Nigeria. As established by the diagnostic statistics and the significance of the Hausman test, the fixed effects (FE) estimates remain the most reliable basis for interpretation because they account for unobserved bank-specific heterogeneity that correlates with governance mechanisms. Relative to the baseline models in Table 3, the inclusion of the interaction terms increases the explanatory power of the fixed effects model from 40.4% to 53.5% for return on assets (ROA) and from 73.9% to 76.1% for Tobin's Q (TOBQ), indicating that audit quality meaningfully shapes how board characteristics influence financial performance. This is theoretically important because it suggests that governance mechanisms do not operate in isolation; rather, their effectiveness depends on the strength of monitoring and assurance mechanisms embedded in the audit environment.

Consequently, the discussion focuses strictly on the interaction effects and how audit quality alters the baseline relationships observed earlier. Beginning with the interaction between audit quality and board size (AUDF × BODS), the fixed effects coefficient is positive but statistically insignificant for both ROA ($\beta = 0.0964$) and Tobin's Q ($\beta = -0.0135$). Relative to the baseline model where board size exerted a negative and significant effect on ROA, the positive interaction coefficient suggests that higher audit quality weakens the harmful profitability effect of large boards, even though the moderation is not sufficiently strong to become statistically meaningful. This pattern suggests that external audit scrutiny may partially reduce coordination inefficiencies and agency problems associated with large boards by strengthening accountability and financial discipline. In practical terms, rigorous auditing may compel larger boards to function more efficiently through stronger reporting requirements and enhanced oversight mechanisms.

However, because the moderation remains insignificant, audit quality appears insufficient to fully offset the structural inefficiencies associated with excessively large boards. This finding partly aligns with agency theory, which predicts that external monitoring mechanisms can complement internal governance arrangements in reducing managerial opportunism.

However, the absence of significance suggests that board size inefficiencies may be deeply structural and therefore less responsive to audit intervention.
The interaction between audit quality and board gender diversity (AUDF × BOGD) records a positive but statistically insignificant coefficient for ROA ($\beta = 0.0251$) and Tobin's Q ($\beta = 0.0010$). Compared with the baseline model where board gender diversity exerted a negative and significant effect on ROA, the positive interaction term suggests that stronger audit quality improves the effectiveness of gender-diverse boards by mitigating the earlier adverse profitability effect. This result implies that when stronger audit monitoring exists, female directors may become more effective contributors to governance and strategic oversight. Audit quality may provide an institutional structure that amplifies transparency, strengthens accountability and enhances the voice of minority board groups, thereby improving their functional influence. Although the moderation remains statistically insignificant, the directional shift from negative baseline influence toward positive moderation suggests that audit quality may help unlock the governance benefits of diversity over time. This interpretation is consistent with resource dependence theory, which argues that diverse boards generate strategic value when supported by enabling governance institutions. The result also partially reconciles the divergence observed in the baseline findings with Akisole and Obele (2024), who found positive governance outcomes associated with female board representation. The interaction between audit quality and board independence (AUDF × BODI) produces one of the strongest moderation effects in the model, exerting a positive and highly significant effect on ROA ($\beta = 0.0676$, $p < 0.01$), although remaining insignificant for Tobin's Q (β

= 0.0020). This result is particularly important when compared with the baseline findings, where board independence exerted a negative and significant effect on profitability. The positive and significant interaction effect indicates that audit quality substantially reverses the adverse profitability effect of independent directors. Put differently, independent boards become more effective when supported by stronger audit monitoring. One plausible explanation is that external audit quality complements independent oversight by reducing information asymmetry and strengthening directors' ability to monitor management effectively. Independent directors may struggle to influence performance when information access is weak, but high-quality audits provide credible financial signals that enhance board decision-making. The implication is that independence alone is insufficient; rather, independent directors require strong audit support to function optimally. This finding strongly converges with agency theory, particularly its argument that multiple monitoring mechanisms jointly reduce agency conflicts. Empirically, the result provides an important qualification to the findings of Kamal (2025) and Nurhei, Efe and Iyayi (2023), suggesting that the effectiveness of board independence may depend on audit quality.

Similarly, the interaction between audit quality and board meetings (AUDF × BODM) exerts a positive and weakly significant effect on ROA ($\beta = 0.2308$, $p < 0.10$), while remaining insignificant for Tobin's Q ($\beta = 0.0146$). Relative to the baseline model in which board meetings negatively and significantly affected profitability, the positive moderation coefficient suggests that stronger audit quality reduces the harmful profitability effect of frequent meetings. This implies that active boards become more productive when supported by high-quality auditing because meetings are likely to become more evidence-based, financially informed and strategically focused. Without credible audit information, frequent meetings may merely reflect governance crises or administrative burdens.

However, under stronger audit quality, board deliberations may become more meaningful and performance-oriented. The implication for policy is clear: regulators and firms should prioritize the quality of governance interactions rather than merely encouraging frequent meetings. This finding partly supports agency theory by showing that audit quality enhances the monitoring function of active boards and also aligns with the argument of Nurhei, Efe and Iyayi (2023) that meeting quality matters more than frequency alone.

Table 4: Regression Results

VARIABLES	ROA Pool OLS	ROA FE	ROA RE	TOBQ Pool OLS	TOBQ FE	TOBQ RE
bods	-0.4235	-0.7202	-0.4235	0.0374	0.0732	0.0374
	(0.461)	(0.477)	(0.461)	(0.047)	(0.055)	(0.047)
bogd	-0.0007	-0.1578*	-0.0007	0.0084	-0.0039	0.0084
	(0.090)	(0.090)	(0.090)	(0.009)	(0.010)	(0.009)
bodi	-0.3937***	-0.3867***	-0.3937***	-0.0106	-0.0113	-0.0106
	(0.140)	(0.122)	(0.140)	(0.014)	(0.014)	(0.014)
bodm	-0.5517	-1.3597**	-0.5517	-0.0349	-0.0862	-0.0349

	(0.772)	(0.663)	(0.772)	(0.078)	(0.077)	(0.078)
audf	-4.8917**	-8.6841***	-4.8917**	-0.0259	-0.2240	-0.0259
	(2.360)	(2.142)	(2.360)	(0.238)	(0.249)	(0.238)
aud x bods	0.0596	0.0964	0.0596	-0.0087	-0.0135	-0.0087
	(0.081)	(0.082)	(0.081)	(0.008)	(0.010)	(0.008)
audf x bogd	-0.0006	0.0251	-0.0006	-0.0013	0.0010	-0.0013
	(0.016)	(0.016)	(0.016)	(0.002)	(0.002)	(0.002)
audf x bodi	0.0662***	0.0676***	0.0662***	0.0019	0.0020	0.0019
	(0.025)	(0.021)	(0.025)	(0.003)	(0.002)	(0.003)
audf x bodm	0.0666	0.2308*	0.0666	0.0052	0.0146	0.0052
	(0.142)	(0.124)	(0.142)	(0.014)	(0.014)	(0.014)
lev	-0.0293***	-0.0413***	-0.0293***	0.0103***	0.0113***	0.0103***
	(0.008)	(0.009)	(0.008)	(0.001)	(0.001)	(0.001)
fsiz	1.3919**	-1.6141	1.3919**	0.0155	0.1068	0.0155
	(0.545)	(1.317)	(0.545)	(0.055)	(0.153)	(0.055)
fage	-0.0284***	0.1711*	-0.0284***	-0.0026***	-0.0071	-0.0026***
	(0.008)	(0.089)	(0.008)	(0.001)	(0.010)	(0.001)
Constant	23.8648*	68.5857***	23.8648*	0.2468	0.3564	0.2468
	(13.108)	(14.812)	(13.108)	(1.323)	(1.720)	(1.323)
Observations	143	143	143	143	143	143
p(F-Stat)	0.0000	0.000		0.000	0.000	
R-Squared	0.518	0.535	0.372	0.811	0.761	0.732
Adj R-squared	0.457			0.787		
Mean VIF	1.483			1.483		
Breuch-Pagan	0.000			0.000		
Chow F-Test		0.000			0.000	
Hausman Test						0.000
p(Chi2)			0.000			0.000
LM Test			1.000			1.000

Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Implication of the Findings

Implications for Corporate Managers

The findings carry important implications for corporate managers and board leadership within Nigerian listed banks, particularly in relation to board structuring and governance effectiveness. The evidence that board size, board independence, board meetings, board ownership and directors' remuneration exert negative effects on accounting profitability suggests that governance mechanisms do not automatically translate into superior financial outcomes merely because they satisfy regulatory expectations.

Implication to Investors and Capital Providers

The findings provide critical implications for investors, institutional shareholders and capital providers in evaluating the governance quality and financial sustainability of listed banks in Nigeria. The evidence that several board mechanisms negatively affect accounting profitability suggests that investors should move beyond superficial governance indicators when assessing firm quality.

For instance, large board size, frequent meetings or higher board independence should not automatically be interpreted as signs of effective governance. Rather, investors should critically evaluate whether these governance structures are functionally effective in generating superior performance outcomes. This finding becomes especially important for institutional investors, pension fund administrators and equity analysts who rely on governance signals in portfolio allocation decisions. Investors should therefore shift toward governance quality assessment rather than governance quantity metrics, paying closer attention to director competence, engagement quality, decision effectiveness and performance accountability.

Implications for Regulators and Policy Makers

The findings present significant implications for financial regulators and policy makers, particularly institutions responsible for corporate governance oversight in the Nigerian banking industry. The negative effects associated with several board mechanisms indicate that regulatory prescriptions emphasizing structural governance requirements may not necessarily guarantee better financial outcomes.

Implications for Theory and Practice

The findings contribute important implications for corporate governance theory, particularly the applicability of agency theory and resource dependence theory within emerging financial systems. The evidence that several board mechanisms negatively affect profitability challenges the conventional assumption of governance universalism, which assumes that governance practices automatically produce superior outcomes across institutional contexts.

Specifically, the negative effects of board independence, board meetings and board ownership suggest that governance mechanisms may produce unintended consequences in highly regulated and institutionally complex sectors such as banking.

Conclusion and Direction for Future Research

Corporate governance has long been promoted as a strategic mechanism for strengthening firm performance, particularly in highly regulated industries such as banking where transparency, accountability and risk management are indispensable for institutional survival. Yet, despite decades of governance reforms, concerns remain regarding whether board structures genuinely enhance financial outcomes or merely satisfy regulatory expectations. This uncertainty is particularly pronounced in emerging economies such as Nigeria, where corporate governance systems often operate within environments characterized by institutional fragility, concentrated influence structures and evolving market discipline. While prior studies have examined governance mechanisms and firm performance independently, limited attention has been paid to the conditions under which governance structures become effective, especially the role of audit quality as a reinforcing institutional mechanism. Against this backdrop, the present study set out to examine the moderating role of audit quality on the relationship between board performance and financial performance of listed banks in Nigeria over the period 2012 to 2024.

Specifically, the study investigated whether board size, board independence, board gender diversity, board meetings on financial performance and whether such effects are strengthened or weakened by audit quality proxied by audit fees. Using panel data from eleven listed banks and employing pooled Ordinary Least Squares, fixed effects and random effects estimators, the fixed effects model emerged as the preferred specification following the Hausman test, thereby providing the most reliable basis for inference.

References

Abdul Rahman, R., & Haneem Mohamed Ali, F. (2006). Board of Directors, Audit Committee, Culture and Earnings Management: Events in Malaysia. *Managerial audit log*, *21*(7), 783–804.

Adu, C.A & Ajigbotoso, M.A (2024). Corporate Social Responsibility (CSR) and Deposit Money Bank's Financial Performance. *Indonesian Journal of Banking and Financial Technology*, *2*(2), 81–90.

Ajape, M. K., Oyewale, K., & Adudu, A. R. (2023). Audit Committee Attribute: An Impact Analysis of Corporate Social Responsibility Disclosure Practices for Deposit Money Banks in Nigeria. *Nigeria Journal of Risk and Insurance, 13*(1), 58–78.

Ajarat Oluwakemisola, Moruff. (2025). Effect of Corporate Social Responsibility (CSR) on Financial Performance. *The International Journal of Business & Management*, *12*(12).

Ayinla, R.B., Aliyu, N.S., & Abdullah, A.A. (2022). Audit attributes and the financial reporting quality of listed deposit money banks in Nigeria. *Accounting and Taxation Review, 6*(2): 31-46.

Ayinla, R., Aliyu, N., & Abdullah, A. (2022). Audit committee attributes and the financial reporting quality of listed deposit money banks in Nigeria. *Gulf Journal of Economics & Trade*, 2(1)

Bande, H.M (2023). Corporate Social Responsibility and Financial Performance of Deposit Money Banks in Nigeria. *International Journal of Management Studies and Social Science Research 04*(06):142-158.

Fahmida, L (2025). Economic Implications of Corporate Governance and Corporate Social Responsibility: Evidence from Banks in Bangladesh, Papers 2501.15594, arXiv.org

Freeman (1984) Strategic Management: A Stakeholder Approach. Boston, MA: Pitman.

Hunjra, A. I; Hassan, M. K; Hanif, M; Al-Faryan, M., Abdulaziz, S. (2026) Impact of CSR and Risk of Expropriation on Accounting Quality. *International Journal of Business Governance and Ethics 20*(3/4): 273-290.

Itoya J., Owuze C., Akhator P.A. & Igbokwe I.C. (2022). Effect of Corporate Social Responsibility on Financial Performance in Nigeria. *European Scientific Journal*, ESJ, 18 (19), 173-193.

Jensen, M.C. and Meckling, W.H. (1976) Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3, 305-360.

Kamal Hassan, M. 2015. Corporate Governance, Audit Committee and the Internet Reporting of Strategic Information by UAE Non-Financial Listed Firms. *Accounting and Management Information Systems 14* (3): 508–545.

Mamdouh, A & Saleh, A (2024). Agency Theory, Corporate Governance and Corruption : An Integrative Literature Review Approach. Cogent Social Sciences, 10:1

Mohammed K. A., Kayode, O., & Abiodun, R. A. (2023). Audit Committee Attribute: An Impact Analysis of Corporate Social Responsibility Disclosure practices for Deposit Money Banks in Nigeria. *Nigerian Journal of Risk and Insurance, 13*(1): 58-78.

Nurhei, Efe and Iyayi (2023) Board Structure and Financial Reporting Quality in Quoted Non-Financial Firms in Nigeria. International Journal of Research and Review
10(4): 365-380.

Onyebuchi, D. O. M., & Barinem, D. Z. C. (2026). Corporate Social Responsibility Costs and Financial Performance of Listed Deposit Money Banks in Nigeria. *Innovative Journal of Accounting, Marketing and Management Research, 13*(2) 46-60.

Okolie, A. O. & Ogbaragu,J. S. (2022). Audit Committee Effectiveness and Corporate Financial Performance of Quoted Deposit Money Banks in Nigeria. *International Journal of Economics and Management Studies, 9* (3): 24-34.

Onyebuchi, D. O. M., & Barinem, D. Z. C. . (2026). Corporate Social Responsibility Costs and Financial Performance of Listed Deposit Money Banks in Nigeria. *BW Academic Journal*. 13(2):46-60.

Wang, P. & Liang, S. (2025). Internal Audit Independence, Legal Person Governance Structure, and Financial Reporting quality, *International Review of Economics & Finance, Elsevier, 101*(C).

Williams, E & Johnston, M N (2025) The Evolution of Corporate Social Responsibility and Its Impact on Financial Success.